

Application No. 09/772,469
Amendment dated July 23, 2003
Reply to Office Action dated May 7, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Twice amended) A portable data collection device comprising:

a display;

[a] manual data entry circuitry;

a processor for receiving entered data and for controlling the display;

a first wireless communication circuit for receiving data using a first protocol over short range from at least one data transmitting unit separate from the data collection device and comprising a bar code reader;

a second wireless communication circuit using a second protocol for transmitting and receiving data over a long range from a host;

the data collection device having a device identification, the device identification being represented as a bar code associated with the data collection device;

each data transmitting unit having a respective unique unit identification; and

wherein the processor is configured to, in response to the receipt from a specific data transmitting unit of data comprising the respective unit identification and the device identification, associate the specific data transmitting unit with the data collection device

[wherein the processor is receptive of identification data relating to the at least one data transmitting unit for field associating at least one data transmitting unit with the portable data collection device, the at least one data transmitting unit is a bar code reader and wherein the

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identification data comprises information in a bar code associated with the portable data collection device and a unique identification of the at least one data transmitting unit].

2. cancelled

3. (previously amended) The device according to claim 1, wherein the bar code is affixed to the portable data collection device.

4. (original) The device according to claim 1, wherein the processor is receptive of a unique identification of the at least one data transmitting unit through the manual data entry circuitry for field associating.

5. (original) The device according to claim 1, further comprising a cradle for the at least one data transmitting unit and wherein the processor is receptive of the identification data relating to a cradled data transmitting unit for field associating.

6. (original) The device according to claim 5, wherein the at least one data transmitting unit has a rechargeable battery therein and wherein the battery is recharged when the unit is cradled.

7-15 cancelled.

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16. (previously amended) A data collection system comprising:
at least one data transmitting unit for scanning bar codes and for producing a decode signal representative of a scanned bar code and having communication circuitry for the wireless transmission of the decode signal over a short range using a first protocol; and
a portable data collection device comprising a display, manual data entry circuitry, a processor for receiving entered data and for controlling the display, a first communication circuit for receiving data from the at least one data transmitting unit using the first protocol over a short range and a second communication circuit using a second protocol for wireless transmitting and receiving of data over a long range from a host;
the processor being configured to controls the display to depict a keypad array of discrete keypad areas, each representing at least one of alphanumerics and icons on the display and corresponding to data to be entered by actuating same and wherein the processor reconfigures the array of alphanumerics and icons for different operations, the depicted keypad array including at least one start scan key to initiate scanning on the at least one data transmitting unit, the processor reconfiguring a position of the start scan key on the display to depict a start scan key for a right handed user and for a left handed user.

17. (original) The data collection system according to claim 16, wherein the at least one data transmitting unit comprises a light source, a scan element, a scan motor for moving the scan element, a photodetector, signal processing circuitry for receiving a signal from the photodetector, triggering circuitry for initiating a scan, and power management circuitry for

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controlling the light source, scan motor and signal processing circuitry to stagger the activation thereof upon the initiating of a scan by the triggering circuitry.

18. (original) The data collection system according to claim 17, wherein the at least one data transmitting unit further comprises decode circuitry for decoding the signal received from the photodetector.

19. (original) The data collection system according to claim 16, further comprising a headset receptive of a voice input for producing voice signals and having communication circuitry for the wireless transmission of the voice signals over a short range using the first protocol.

20. (original) The data collection system according to claim 16, wherein the processor monitors the distance of the at least one data transmitting unit from the portable data collection device to indicate when the distance exceeds a given distance.

21. cancelled

22. (previously amended) The data collection system according to claim 16, wherein the portable data collection device has a cradle for docking at least one data transmitting unit.

23-24. cancelled

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25. (original) The data collection system according to claim 16, wherein the at least one data transmitting unit is associated with the portable data collection device and wherein the device communicates with each unit to lower the transmit power thereof.

26. (previously amended) A data collection system comprising:
at least one data transmitting unit for scanning bar codes and for producing a decode signal representative of a scanned bar code and having communication circuitry for the wireless transmission of the decode signal over a short range using a first protocol; and
a portable data collection device comprising a display, manual data entry circuitry, a processor for receiving entered data and for controlling the display, a first communication circuit for receiving data from the at least one data transmitting unit using the first protocol over a short range and a second communication circuit using a second protocol for wireless transmitting and receiving of data over a long range from a host;
wherein the at least one data transmitting unit is associated with the portable data collection device and wherein the device communicates with each unit to agree to transmit at given time intervals.

27. (twice amended) A data collection system comprising:
at least one data transmitting unit for scanning bar codes and for producing a decode signal representative of a scanned bar code and having communication circuitry for the wireless transmission of the decode signal over a short range using a first protocol; and

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a portable data collection device separate from the data transmitting unit and comprising a display, manual data entry circuitry, a processor for receiving entered data and for controlling the display, a first communication circuit for receiving data from the at least one data transmitting unit using the first protocol over a short range and a second communication circuit using a second protocol for wireless transmitting and receiving of data over a long range from a host;

wherein the at least one data transmitting unit is associated with the portable data collection device and wherein the data collection device communicates with each data transmitting unit to detect the remaining available power in each data transmitting unit to indicate at the data collection device power status of the at least one data transmitting unit to the user.

28. cancelled

29. (original) A portable data collection device comprising: a display; manual data entry circuitry; a processor for receiving entered data and for controlling the display, a first wireless communication circuit for receiving data using a first protocol over short range from at least one data transmitting unit; a second wireless communication circuit using a second protocol for transmitting and receiving data over a long range from a host; and a housing for the display, manual entry circuitry, processor and communication circuits, wherein the housing has two separate sections having bosses for connecting the sections together and wherein the bosses are

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overmolded with shock resistant material to provide a shock mount for components in the housing.

30. cancelled

31. (previously added) The system of claim 1, wherein the first protocol is Bluetooth.

32. (previously added) The system of claim 26, wherein at least one data transmitting unit is configured to enter a low power mode when outside an associated transmit time interval.

33. (previously added) The system of claim 26, wherein the first protocol is Bluetooth.

34. (new) A method of associating a portable data collection device with at least one data transmitting unit comprising the steps of:

providing a portable data collection device having a display, manual data entry circuitry, a processor for receiving entered data and for controlling the display, a first wireless communication circuit for receiving data using a first protocol over short range, and a second wireless communication circuit using a second protocol for transmitting and receiving data over a long range from a host, the data collection device having a device identification associated therewith;

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providing at least one data transmitting unit comprising a bar code reader had having a
respective unit identification therewith;

representing the device identification as a bar code;

scanning the bar code with a specific data transmitting unit;

transmitting from the specific data transmitting unit the respective unit identification and
the device identification using the first protocol;

upon the receipt by the data collection device of the transmission via the first wireless
communication circuit, associating the specific data transmitting unit with the data collection
device.

35. (new) The method of claim 34, further comprising the step of affixing the bar code to the
data collection device.